

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 02/03/98

Date Received: 01/15/98

Project: Metro Self Monitor, PO #M59727

Date Extracted: 01/29/98

Date Analyzed: 01/29/98

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>M59727</u>	<u>Method Blank</u>
Analyte:		
Chromium	0.72	<0.05
Copper	0.54	<0.05
Nickel	0.75	<0.05
Zinc	<0.05	<0.05

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### QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 801043-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.72	0.97	30 vo	0-20
Copper	mg/L (ppm)	0.54	0.67	21 vo	0-20
Nickel	mg/L (ppm)	0.75	0.73	3	0-20
Zinc	mg/L (ppm)	<0.05	0.06	nm	0-20

Laboratory Code: 801043-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.72	103	110	80-120	7
Copper	mg/L (ppm)	5	0.54	96	99	80-120	3
Nickel	mg/L (ppm)	10	0.75	105	104	80-120	1
Zinc	mg/L (ppm)	5	<0.05	94	102	80-120	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	103	102	80-120	1
Copper	mg/L (ppm)	5	104	104	80-120	0
Nickel	mg/L (ppm)	10	105	105	80-120	0
Zinc	mg/L (ppm)	5	107	106	80-120	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

vo - The value reported fell outside the control limits established for this analyte.

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
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**February 3, 1998**

**DUPLICATE COPY**

**INVOICE #98ACU0203-4**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

**RE: Project Metro Self Monitor, PO #M59727: Results of testing requested  
by Gerry Thompson for material submitted on January 15, 1998.**

**1 water sample analyzed for  
Chromium, Copper, Nickel, and Zinc  
using Method 6010 @ \$65 per sample**

**\$ 65.00**

**Amount Due .....**

**\$ 65.00**

**FEDERAL TAX ID (b) (6)**

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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February 3, 1998

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on January 15, 1998 from your Metro Self Monitor, PO #M59727 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

A handwritten signature in black ink, appearing to be 'Kurt Johnson', with a stylized flourish at the end.

Kurt Johnson  
Chemist

Enclosures  
ACU0203R.DOC